

Amendments to the Claims:

1. (Currently Amended) A method comprising the steps of:

a. identifying an injector source and a collector circuit, at least one of the injector source and the collector circuit having a parameter, wherein the injector source is a source that unintentionally activates the collector circuit, resulting in latch-up of the collector circuit;

b. providing latch-up criteria for the collector circuit;

c. determining latch-up sensitivity of the collector circuit based on the latch-up criteria and the parameter;

d. modifying the parameter to adjust the latch-up sensitivity of the collector circuit;
and

e. determining the latch-up sensitivity of the collector circuit based on the latch-up criteria and the modified parameter.

2. (Cancelled).

3. (Original) The method of claim 1, wherein step a) further comprises the step of identifying the parameter as at least one of a physical, structural and spatial parameter.

4. (Original) The method of claim 3, further comprising the step of identifying the parameter through at least one of a schematic generator, a graphical generator and a symbol generator.

5. (Original) The method of claim 1, wherein step d) further comprises the step of modifying the parameter with a graphical user interface.

6. (Original) The method of claim 1, wherein step d) further comprises the step of modifying the physical size of the injector source.

7. (Original) The method of claim 1, wherein step a) further comprises the step of identifying the parameter through at least one parameterized cell.

8. (Currently Amended) A computer program product comprising a computer useable medium having computer readable program code embodied therein for analyzing and modifying latch-up sensitivity of a circuit design, the program product comprising:

program code configured to identify an injector source and a collector circuit, at least one of the injector source and the collector circuit having a parameter, wherein the injector source is a source that unintentionally activates the collector circuit, resulting in latch-up of the collector circuit;

program code configured to determine latch-up sensitivity of the collector circuit based on a latch-up criteria and the parameter; and

program code configured to modify the parameter to adjust the latch-up sensitivity of the collector,

wherein the determining program code is also configured to determine the latch-up sensitivity of the collector circuit based on the latch-up criteria and the modified parameter.

9. (Canceled).

10. (Original) The program product of claim 8, wherein the identifying program code identifies the parameter as at least one of a physical, structural and spatial parameter.

11. (Original) The program product of claim 10, wherein the identifying program code includes at least one of a schematic generator, a graphical generator and a symbol generator.

12. (Original) The program product of claim 8, wherein the parameter is modified with a graphical user interface.

13. (Original) The program product of claim 8, wherein the modifying program code further comprises program code configured to modify a physical size of the injector source.

14. (Original) The program product of claim 11, wherein the identifying program code further comprises program code configured to identify the parameter through at least one parameterized cell.

15. (Currently Amended) A latch-up analysis and parameter modification system comprising:
an injector source and collector circuit identifier that identifies an injector source and a collector circuit, at least one of the injector source and the collector circuit having a parameter, wherein the injector source is a source that unintentionally activates the collector circuit, resulting in latch-up of the collector circuit;

10/605,443

4

a latch-up identifier providing latch-up criteria for the collector circuit;
a parameter modification unit to modify the parameter; and
a latch-up analyzer that determines latch-up sensitivity of the collector circuit based on the latch-up criteria of the latch-up identifier and at least one of the parameter and the modified parameter.

16. (Canceled).

17. (Original) The system of claim 15, further comprising an injector source and collector circuit parameter identifier that identifies the parameter as at least one of a physical, structural and spatial parameter.

18. (Original) The system of claim 17, wherein the injector source and collector circuit parameter identifier comprises at least one of a schematic generator, a graphical generator and a symbol generator.

19. (Original) The system of claim 18, wherein the at least one of a schematic generator, a graphical generator and a symbol generator comprises at least one parameterized cell.

20. (Original) The system of claim 15, wherein the parameter modification unit includes a graphical user interface.